[0163] The display **1060** may include a panel **1062**, a hologram device **1064**, or a projector **1066**. The panel **1062** may be configured to be the same as or similar to the display **960** illustrated in FIG. **9**. The panel **1062** may be implemented, for example, to be flexible, transparent or wearable. The panel **1062** and the touch panel **1052** may be integrated into a single module. The hologram device **1064** may display a stereoscopic image in a space using a light interference phenomenon. The projector **1066** may project light onto a screen so as to display an image. The screen may be arranged in the inside or the outside of the electronic device **1001**. The display **1060** may further include a control circuit for controlling the panel **1062**, the hologram device **1064**, or the projector **1066**.

[0164] The interface **1070** may include, for example, an HDMI **1072**, a (USB **1074**, an optical interface **1076**, or a D-subminiature (D-sub) **1078**. The interface **1070** may be included, for example, in the communication interface **970** illustrated in FIG. **9**. Additionally or generally, the interface **1070** may include, for example, a mobile high definition link (MHL) interface, a SD card/multi-media card (MMC) interface, or an infrared data association (IrDA) standard interface.

[0165] The audio module **1080** may convert a sound and an electric signal in dual directions. At least a part of the audio module **1080** may be included, for example, in the input/output interface **950** illustrated in FIG. **9**. The audio module **1080** may process, for example, sound information that is input or output through a speaker **1082**, a receiver **1084**, an earphone **1086**, or the microphone **1088**.

[0166] The camera module **1091** is configured for shooting a still image or a video may include, for example, at least one or more image sensors (e.g., a front sensor or a rear sensor), a lens, an image signal processor (ISP), or a flash (e.g., an LED or a xenon lamp).

[0167] The power management module **1095** may manage, for example, power of the electronic device **1001**. A power management integrated circuit (PMIC), a charger IC, or a battery gauge may be included in the power management module **1095**. The PMIC may have a wired charging method and/or a wireless charging method. The wireless charging method may include, for example, a magnetic resonance method, a magnetic induction method or an electromagnetic method and may further include an additional circuit, for example, a coil loop, a resonant circuit, or a rectifier, and the like. The battery gauge may measure, for example, a remaining capacity of the battery **1096** and a voltage, current or temperature thereof while the battery is charged. The battery **1096** may include, for example, a rechargeable battery and/or a solar battery.

[0168] The indicator **1097** may display a specific state of the electronic device **1001** or a part thereof (e.g., the processor **1010**), such as a booting state, a message state, a charging state, and the like. The motor **1098** may convert an electrical signal into a mechanical vibration and may generate the following effects: vibration, haptic, and the like. Although not illustrated, a processing device (e.g., a GPU) for supporting a mobile TV may be included in the electronic device **1001**. The processing device for supporting the mobile TV may process media data according to the standards of digital multimedia broadcasting (DMB), digital video broadcasting (DVB), MediaFlo™, or the like.

[0169] Each of the above-mentioned elements of the electronic device **1001** may be configured with one or more components, and the names of the elements may be changed according to the type of the electronic device. The electronic device may include at least one of the above-mentioned elements, and some elements may be omitted or other additional elements may be added. Furthermore, some of the elements of the electronic device **1001** may be combined with each other so as to form one entity, so that the functions of the elements may be performed in the same manner as before the combination.

[0170] FIG. **11** illustrates a block diagram of a program module, according to an embodiment of the present disclosure.

[0171] A program module **1110** may include an OS to control resources associated with an electronic device (e.g., the electronic device **901**), and/or diverse applications (e.g., the application program **947**) driven on the OS. The OS may be, for example, Android™, iOS™, Windows™, Symbian™, Tizen™, or Samsung Bada OS™.

[0172] The program module **1110** includes a kernel **1120**, a middleware **1130**, an API **1160**, and/or an application **1170**. At least a part of the program module **1110** may be preloaded on an electronic device or may be downloadable from the electronic device **902** or **904**, the server **906**, and the like.

[0173] The kernel **1120** may include, for example, a system resource manager **1121** or a device driver **1123**. The system resource manager **1121** may perform control, allocation, or retrieval of system resources. The system resource manager **1121** may include a process managing unit, a memory managing unit, or a file system managing unit. The device driver **1123** may include, for example, a display driver, a camera driver, a Bluetooth driver, a shared memory driver, a USB driver, a keypad driver, a Wi-Fi driver, an audio driver, or an inter-process communication (IPC) driver.

[0174] The middleware **1130** may provide, for example, a function that the application **1170** needs in common, or may provide diverse functions to the application **1170** through the API **1160** to allow the application **1170** to efficiently use limited system resources of the electronic device. The middleware **1130** may include at least one of a runtime library **1135**, an application manager **1141**, a window manager **1142**, a multimedia manager **1143**, a resource manager **1144**, a power manager **1145**, a database manager **1146**, a package manager **1147**, a connectivity manager **1148**, a notification manager **1149**, a location manager **1150**, a graphic manager **1151**, a security manager **1152**, or a payment manager **1154**.

[0175] The runtime library **1135** may include, for example, a library module that is used by a compiler to add a new function through a programming language while the application **1170** is being executed. The runtime library **1135** may perform input/output management, memory management, or capacities about arithmetic functions.

[0176] The application manager **1141** may manage, for example, a life cycle of at least one application of the application **1170**. The window manager **1142** may manage a GUI resource that is used in a screen. The multimedia manager **1143** may identify a format necessary for playing diverse media files, and may perform encoding or decoding of media files by using a codec suitable for the format. The resource manager **1144** may manage resources such as a storage space, memory, or source code of at least one application of the application **1170**.